

The Fractional Parentago Coefficients for the Wave Function SOV/56-34-3-24/55
of Four Particles

$$\Psi \{ [j_1 j_2 (j_1 T_1)]_a, [j_3 j_4 (j_2 T_2)]_a, JTMM_T \}$$

The symbol $[]_a$ indicates that the corresponding functions were antisymmetrized. The indices at j denote the various angular momenta. The above mentioned function must be completely antisymmetrized and then it must be expanded with respect to certain functions analogous to this function (which, however, contain other momenta in general). The operator of the complete antisymmetrization is put down explicitly. The expression resulting this way for the above mentioned function is put down exactly. The expressions occurring in this function are all put down in detail. The complete antisymmetric function obtained this way is still further transformed, and moreover is standardized. The fractional parentage formation resulting directly this way for the case of different j is put down explicitly. When some j are identical, the functions obtained by the formula put down are not directly standardized so that the standardizing

Card 2/3

The Fractional Parentage Coefficients for the Wave Function of Four Particles SOV/56-34-3-24/55

factors must be determined as an additional step. At the end lengthy, finally standardized expressions are put down. The fractional parentage development discussed were derived in order to use them for the computation of the two-particle interaction in nuclei. They can also be used in atomic spectroscopy.

There are 9 references, 0 of which are Soviet

ASSOCIATION: Leningradskiy sel'skokhozyaystvennyy institut
(Leningrad Agricultural Institute)

SUBMITTED: September 26, 1957

Card 3/3

24(5)

AUTHOR:

Zel'tser, G. I.

SOV/56-35-4-48/52

TITLE:

The Condition of Cyclic Symmetry by Fok and the Schemata of
Young (Usloviye tsiklicheskoy simmetrii Foka i skhemy Yunga)

PERIODICAL:

Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1958,
Vol 35, Nr 4, pp 1058-1059 (USSR)

ABSTRACT:

In connection with the construction of the wave function of
a system of n electrons by Fok's method (Ref 1) the following
demands are made on the coordinate wave function Ψ :1) Asymmetry in the first k-arguments. 2) Antisymmetry in the
remaining n-k-arguments. 3) The condition of the cyclic symmetry
$$(1 - \sum_{i=k+1}^n P_{ik})\Psi = 0.$$
 Here P_{ik} denotes the operator of thetransposition of the arguments i and k. Also $k \leq n-k$ is assumed,
in which case $s = n/2-k$ denotes the total spin of the system.
Every function constructed in accordance with Young's scheme
with 2 columns satisfies these conditions, i.e. Young's operator

Card 1/3

SOV/56-35-4-4-1-

The Condition of Cyclic Symmetry by Fok and the Schemata of Young

$$Y_{n+k, k} = A(1, \dots, k)A(k+1, \dots, n) \prod_{m=1}^k S(m, k+m) \quad (\text{which corresponds}$$

to a scheme with two columns which is illustrated in the present paper) satisfies the following condition of cyclic symmetry:

$$(1 - \sum_{i=k+1}^n p_{ik}) Y_{n-k, k} = 0. \quad \text{The present paper is intended to}$$

show that this result can easily be generalized for Young's schemata of any form and with any number of columns. The author investigates a Young scheme of general nature with p columns having a length of $\lambda_1 \gg \lambda_2 \gg \dots \gg \lambda_p > 0$ and

$\lambda_1 + \lambda_2 + \dots + \lambda_p = n$, and he shows that Young's operator satisfies the condition of cyclic symmetry with respect to any 2 columns. A function symmetrized with respect to Young's general scheme has a symmetric character that corresponds to the normal Hund (Hund) form. The applicability of Fok's conditions to Young's schemata with 2 columns is an important special case within the result obtained. There are 2 figures

Card 2/3

SOV/56-35-4-48/52

The Condition of Cyclic Symmetry by Fok and the Schenata of Young
and 4 references, 2 of which are Soviet.

ASSOCIATION: Leningradskiy sel'skokhozyaystvennyy institut
(Leningrad Agricultural Institute)

SUBMITTED: March 23, 1958

Card 3/3

5(4),23(5)

AUTHORS:

Zel'tser, G. I., Kartuzhanskiy, A. L. SOV/20-123-3-32/54

TITLE:

On the Theory of the Sensitivity Fluctuations of the Crystals
of Nuclear Photographic Emulsions (K teorii fluktuatsiy
chuvstvitel'nosti kristallov yadernykh fotograficheskikh emul'siy)

PERIODICAL:

Doklady Akademii nauk SSSR, 1958, Vol 123, Nr 3, pp 495-497
(USSR)

ABSTRACT:

K. S. Bogomolov's (Ref's 1, 2) attempt to develop a theory of ionization fluctuations in an emulsion consisting of homogeneous crystals failed because of non-agreement with experiments. Besides, the failures of this theory showed that the ionization fluctuations play only a minor part even with respect to relativistic particles, and that the experimentally determined fluctuations of the average density of particle traces in the emulsions are rather due to sensitivity fluctuations of the individual crystals. The present paper deals with a suitable variant of this theory. According to theory, the effect produced by the sensitizer may be considered as equivalent to the production of $v_o \Delta n$ silver atoms without exposure. Next, the distribution of these silver atoms over $v_o - v_n$ crystals is investigated. v_n denotes the density of the trace before

Card 1/2

On the Theory of the Sensitivity Fluctuations of
the Crystals of Nuclear Photographic Emulsions

SOV/20-123-3-32/54

sensitization and V_0 - the number of crystals located on the track unit. The problem to be solved in this connection is that regarding the share of urns containing a minimum number of balls in the total number of urns in the case of a random distribution of r indistinguishable balls (silver atoms) over s urns (crystals). The calculation process is outlined and the resulting formulae are explicitly written down. These formulae contain no arbitrary parameters and may be applied also to the ultrafine-grained emulsions of N. A. Perfilov and may be used for the purpose of calculating the veil accompanying the secondary sensitization of one and the same emulsion. There are 11 Soviet references.

PRESENTED: June 25, 1958, by A. E. Ioffe, Academician

SUBMITTED: June 21, 1958

Card 2/2

23848
S/020/61/137/006/007/020
B104/B201

24,6100(1395,1160,1055)

AUTHOR: Zel'tser, G. I.

TITLE: Determination of the total momentum of a system of n particles
for the j^n configuration

PERIODICAL: Doklady Akademii nauk SSSR, v. 137, no. 6, 1961, 1339-1342

TEXT: By way of introduction, the author discusses the problem of the possible values of the total momentum of homogeneous particles of an atom shell, and in this connection he refers to Jahn (Proc. Roy. Soc.; A201, 516, (1950)) and Flowers (Proc. Roy. Soc., A212, 248, (1952)), who have developed and used the "chain" method of determining the J-structure of the atom shell. When using this method it is of essential importance that a certain number of different Young schemes with one and the same j be equivalent as to their J-structure. Larger j values, however, give rise to difficulties in the calculation. The explicit formula given here serves to determine the J-structure by the characters of a corresponding representation of the three-dimensional rotation group R_3 . It is shown here that the irreducible representation D_j of the group R_3 for three-dimensional rotations in the function

Card 1/4

23848

S/020/61/137/006/007/020
B104/B201

Determination of the total ...

space $\Psi(jm)$ produces in the tensor space $\Psi(\lambda)$ a representation of R_3 , which is reducible and is indicated by $\Gamma_{\lambda} = \sum_j c_j D_j$. This development determines the J-structure of a tensor with given exchangeable symmetry (λ) . The coefficients c_j are determined by the characters $\chi_{\lambda}(q)$ of the representation of Γ_{λ} with formula

$$c_j^{(\lambda)} = \int \chi_{(\lambda)}(q) \chi_j(q) d\tau. \quad (2).$$

q is an angle of rotation; $\chi_j(q) = \sin(J + 1/2)q / \sin q/2$ describes the character of the irreducible representation of this group. To determine the J-structure it is necessary to know the characters $\chi_{\lambda}(q)$; in the case where the characters coincide, also the J-structures coincide. With the aid of the unitary group $U(k)$ the author finds:

$$\chi_{(\lambda)}(q) = \prod_{p' > p=1}^k \frac{\sin(l_p - l_{p'})q/2}{\sin(p' - p)q/2}. \quad (10).$$

Card 2/4

23848
S/020/61/137/006/007/020
B104/B201

Determination of the total ...

These characters are written with the aid of definition

$$D_s(l_1, \dots, l_p) = \sum_{p' > p=1}^k \sin(l_p - l_{p'}) \frac{\varphi}{2}. \quad (11)$$

in the form

$$\chi_{\{k\}}(\varphi) = \frac{D_s(l_1, \dots, l_k)}{D_s(k-1, \dots, 0)}. \quad (12).$$

Formula (12), jointly with (2), fully determines the J-structure. A special case of (12) is finally examined, and the coincidence of some J-structures is derived. The J-structure of an antisymmetrical tensor of the order n in the k-dimensional space is shown to coincide with the J-structure of a symmetrical tensor of the same order in the k'-dimensional space. In other words: The J-structure of an antisymmetrical configuration of n particles with the individual momenta j_F coincides with the J-structure of a symmetrical configuration of n particles with the individual momenta j_B under the condition of $j_F = j_B + (n - 1)/2$ (16). The Young scheme with the decomposition

$$(\lambda') = \underbrace{(p \dots p)}_q \underbrace{r \dots r}_{r'} \underbrace{0 \dots 0}_k, \quad (17),$$

Card 3/4

Determination of the total ...

23848
S/020/61/137/006/007/020
B104/B201

presented in Fig. 1, is examined, and

$$\chi_{(\lambda)}(\varphi) = \prod_{l=1}^r \frac{[(r-l)_s]! (p+q-r-l)_s! (p+k-l)_s!}{(p-l)_s! (p+q-l)_s! (q-l)_s! (k-q+r-l)_s!} \quad (18)$$

is obtained. This expression is invariant under a transformation to an associated scheme $\{\tilde{\lambda}\}$ (i.e., an interchange $p \leftrightarrow q$), if, at the same time, one changes over from dimension k to dimension $\tilde{k} = k + p - q$. In other words: The scheme of a given J -structure coincides with associated schemes under the condition $\tilde{j} = j + (p - q)/2$ (19). Condition (16) is a special case of (19) for $p = n$ and $q = r = 1$. Ye. D. Trifonov is mentioned. There are 1 figure and 4 references: 2 Soviet-bloc and 2 non-Soviet-bloc.

ASSOCIATION: Leningradskiy sel'skokhozyaystvennyy institut (Leningrad Institute of Agriculture)

PRESENTED: December 21, 1960, by Ya. B. Zel'dovich, Academician

SUBMITTED: December 17, 1960

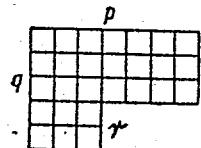


Fig. 1

Card 4/4

ZEL'TSER, G.S.

Profitability of the Cherepovets Metallurgical Plant. Stal' 23
no.9:841-844 S '63. (MIRA 16:10)

ZEL'TSER, G.Ya.; VOLOBOYEV, I.N.; KOSTIN, A.P.; BULGAKOV, A.A.;
VOZNYUK, V.S.; KALMYKOV, A.M.; STUDENTSOV, S.A.; BERSHIDSKIY,
P.I.; MOISEYEV, G.A., inzh., retsenzent; SOBAKIN, V.V., inzh.,
red.; VOROTNIKOVA, L.F., tekhn. red.

[The TGl02 diesel locomotive] Teplovoz TGl02. Moskva, Transzhelodor-
izdat, 1962. 150 p.
(MIRA 16:1)
(Diesel locomotives--Hydraulic drive)

ZEL'TSER, I.G.; KAMENEV, Yu.S.; SOBOLEV, S.K.; KARNAUKHOV, V.V.; SOROKIN, N.A.

Temperature measurement in a converter bath. Metallurg 10
no.6:22-23 Je '65. (MIRA 18:6)

1. Zavod im. Il'icha i Kiyevskiy institut avtomatiki.

FILICHKIN, I.F.; KUKURUZNYAK, I.S.; ZEL'TSER, I.G.; VITIN, G.V.;
LIFSHITS, A.G.

Open-hearth furnaces or oxygen converters. Stal' 21 no.9:
792-798 S '61. (MIRA 14:9)

1. Cherepovetskiy metallurgicheskiy zavod (for Filichkin).
2. Zavod "Krivorozhstal'" (for Kukuruznyak, Zel'tser). 3.
- Gosudarstvennyy soyuznyy institut po proyektirovaniyu
metallurgicheskikh zavodov (for Vitin, Lifshits).
(Open-hearth furnaces) (Converters)

ZEL'TSER, I.N. (Tula)

Restoration of removable dental prostheses. Stomatologija no.2:57
Mr-Ap '54. (MLRA 7:4)
(Artificial teeth)

1. ZEL'TSER, K. Z.
2. USSR (600)
4. Pumping Machinery
7. Remodeling a type "V" pump. [Abstract] Izv.Glav.upr.geol.fon. no. 2, 1947.
9. Monthly List of Russian Accessions, Library of Congress, March 1953, Unclassified.

KELESOV, R.; AYDARKHANOV, B.A.; ZEL'TSER, M.F.; KIM, G.G.; TSOY, V.P.

Spreading of sheep goiter in Alma-Ata Province. Izv. AN
Kazakh. SSR. Ser. biol. nauk 3 no.5:102-105 S-0 '65.

(MIRA 18:11)

ZEL'TSER, M. S.

Zel'tser, M. S. -- "Infrared Excess and Total Emission of Corona According to Radiometric Measurements." Cand Phys-Math Sci, Main Astronomical Observatory, Acad Sci USSR, Leningrad 1953. (Referativnyy Zhurnal—Astronomiya) (Jan 54)

SO: SUM 168, 22 July 1954

ZEL'TSER, M.S.

Radiometry of the solar corona (Observations of the total solar
eclipse of February 25, 1952). Biul.Abast.astrofiz.obser. no.16:
9-57 '54. (MLRA 7:10)
(Sun--Corona) (Eclipses, Solar--1952)

AUTHOR: Zel'tser, M., Candidate of Physical and Mathematical Sciences. SCV/29-58-40-7/28

TITLE: Temperature of the Moon(Temperatura luny)

PERIODICAL: Tekhnika molodezhi, 1958, Nr 10, p. 19, USSR

ABSTRACT: In the Glavnaya astronomiceskaya observatoriya Akademii nauk SSSR (Main Astronomical Observatory, AS USSR) moon temperatures are investigated. The observations are made by means of received reflecting telescopes with parabolic mirrors. The radiation by the mirror of the telescope consists of sun radiation reflected by the moon and of the radiation originating from the moon. In order to be able to compute the temperature of the moon it is necessary to know the intensity of the radiation originating from the moon. Fortunately both radiations have a different wave-length and may be separated by water filters which only absorb heat radiation. It is true, however, that the water filter cannot separate both radiations completely. In order to find exact values additional computations have to be made. Absorption by the earth's atmosphere has also

Card 1/2

Temperature of the Moon

SOV/29-58-10-7/28

to be taken into account. The latter changes night by night and has to be determined for each individual case. At the moment it may be regarded as certain that the temperature of the moon fluctuates between +120°C at noon and -150°C in the afternoon (lunar time). The observations showed a considerably rapid decrease of temperature at dawn. Within 3 hours temperature drops through almost 200°. This points to a moderate heat conductivity of the surface layer. It is probable that the moon surface is covered with an about 5 cm high dust-like layer. For the time being it is difficult to say anything about the layers below.

ASSOCIATION: Pulkovskaya observatoriya (Pulkovo Observatory)

Card 2/2

PHASE I BOOK EXPLOITATION

SOV/4313

Barabashov, N.P., V.A. Bronshten, M.S. Zel'tser, N.L. Kaydanovskiy, A.V. Markov, K.P. Stanyukovich, N.N. Sytinskaya, A.V. Khabakov, Sh.T. Khabibullin, V.V. Sharonov, and A.A. Yakovkin

Luna (The Moon) Moscow, Fizmatgiz, 1960. 384 p. 4,500 copies printed.

Ed.: (Title page): A.V. Markov, Doctor of Physics and Mathematics; Ed.: G.A. Manova; Tech. Ed.: N.Ya. Murashova.

PURPOSE: This book is intended for astronomers, astrophysicists, and other scientific and technical personnel interested in lunar research.

COVERAGE: The book, written by 11 Soviet authorities, summarizes and evaluates research done to date in selenology. The motion, rotation, and figure of the Moon, physical properties of the lunar surface, the question of the existence of lunar atmosphere, mapping of the Moon, radar investigations, and the effect of external cosmic forces on the Moon are discussed. An index of Russian and Latin designations of lunar features is included. The text is illustrated with 110 figures and 32 tables. There are 74 references: 34 Soviet, 32 English, 6 German, and 2 French.

Card 1/6

SOV/4313

The Moon

TABLE OF CONTENTS:

Foreword	5
Ch. I. Motion, Rotation, and Figure of the Moon (A.A. Yakovkin)	7
1. Certain data on the Moon, its motion and figure	7
2. History of the theory of the Moon's motion	10
3. Determination of the lunar mass	13
4. Optical libration of the Moon	16
5. Determining the coordinates of lunar surface features from observation	19
6. Corrections for the relief of the Moon's limb	22
7. Physical libration of the Moon	28
8. The figure of the Moon	39
9. Determination of the elevations of lunar mountains	45
10. Processing the observations of the lunar occultation of stars	47
11. Utilizing lunar observations for geodetic purposes	50
12. Possible utilization of lunar observations for interplanetary navigation	52
Bibliography	53

Card 2/6

SOV/4313

The Moon

Ch. II. Lunar Cartography and Selenographic Coordinates (Sh.T. Khabibullin)	57
1. Selenographic coordinates	57
2. Cartographic grid for lunar maps	58
3. Physical coordinates of the Moon	60
4. Methods for the determination of selenographic coordinates	63
5. The system of positions of the Moon's surface details	68
6. Maps and photographic atlases of the Moon	70
7. Possible method for determining geographical position on the Moon	72
Bibliography	75
Ch. III. Description of the Surface of the Moon (A.V. Markov)	77
Bibliography	101
Ch. IV. Problem of the Moon's Atmosphere (N.N. Sytinskaya)	103
1. Introduction	103
2. Theoretical considerations	104
3. Observations of the lunar occultation of stars, as a means of detecting the atmosphere from refraction phenomena	109
4. Attempts to detect the lunar atmosphere by spectroscopic methods	114
5. Estimation of the density of the lunar atmosphere according to the brightness and polarization of diffused light	116

Card 3/6

SOV/4313

The Moon

6. Use of radioastronomic observations to search for the lunar atmosphere	122
Bibliography	123
Ch. V. Physical Properties of the Surface of the Moon	125
1. Albedo and the color of the Moon's surface (N.P. Barabashov)	125
Bibliography	155
2. Polarization properties of the Moon's surface (A.V. Markov)	156
3. The temperature of the Moon's surface (M.S. Zel'tser)	174
Bibliography	201
Ch. VI. Investigation of the Moon by Radio Methods (N.L. Kaydanovskiy)	203
Introduction	203
1. Radiolocation of the Moon	204
Bibliography	219
2. Radioastronomic investigation of the Moon	220
Bibliography	239
Ch. VII. Characteristic Features of the Moon's Relief. Basic Problems of the Origin and Sequence of Development of Lunar Formations (A.V. Khabakov)	241
1. Some general features of the lunar figure	242

Card 4/6

SOV/4313

The Moon

2. The scale and typical forms of lunar relief	254
3. Classification and nomenclature of the typical forms of lunar relief	258
4. Criteria determining the sequence of formation of lunar relief	269
5. Main periods in the history of the development of the Moon's surface	282
Bibliography	295

Ch. VIII. The Role of External Cosmic Factors in the Evolution of the Moon (K.P. Stanyukovich and V.A. Bronshcen)

1. Structural features of craters	302
2. Location of craters on the Moon's surface	304
3. Formation of seas and clefts	305
4. The theory of explosion phenomena resulting from the fall of meteorites to the Moon	312
5. Formation of bright rays near lunar craters	325
6. Collisions of meteorites with asteroids	328
Bibliography	328

Ch. IX. Surface Structure of the Moon (V.V. Sharonov)

1. Method of investigation	331
2. Summary of the basic data	331
3. Hypothesis on the fresh rocky surface of magmatic rock	335

Card 5/6

The Moon

SOV/4313

- | | |
|--|-----|
| 4. Hypothesis on the change of color in minerals due to the effect of various types of radiation | 342 |
| 5. Hypothesis on crust weathering and sedimentary rocks | 344 |
| 6. Hypothesis on dust cover resulting from rock erosion | 348 |
| 7. Hypothesis on ground cover made of meteoric material | 351 |
| 8. Meteoric slag hypothesis | 354 |
| Bibliography | 362 |

Conclusion (A.V. Markov)

365

Appendices

378

AVAILABLE: Library of Congress (QB 581.M3)

Card 6/6

JA/dwm/sfm
10/13/60

EL'KIN, M.A.; ZEL'TSER, M.Ya.

Rupture of the ovary in children. Akush. i gin. 40 no.1:141-
142 Ja-F '64. (MIRA 17:8)

1. Bol'nitsa Leningradskogo ordena Lenina i ordena Krasnogo
Znameni zavoda "Bol'shevik" (glavnnyy vrach V.A. Tvaradze) i
bol'nitsa imeni Uritskogo (glavnnyy vrach D.S. Shushkov).

ZEL'TSER, M. Ye.

Morphological criteria of the functional activity of the thyroid
gland in rats with serious lead poisoning. Izv. AN Kazakh. SSR
Ser. med. nauk 11 no.3:60-64 '64 (MIRA 18:1)

ZEL'TSER, M.Ye.

Secretion of thyrotropic and adrenocorticotrophic hormones
in experimental lead intoxication. Izv. AN Kazakh. SSR. Ser.
med. nauk no.3:38-41 '63. (MIRA 17:1)

ZEL'TSER, M.Ye.

Distribution of iodine -131 in the thyroid gland, blood plasma,
and the salivary gland in experimental lead poisoning in rats.
Izv. AN Kazakh. SSR. Ser. med. nauk no.1:66-70 '63.
(MIRA 16:10)

ZEL'TSER, M.Ye.

Reaction of the thyroid gland in the initial stage of experimental lead poisoning. Izv. AN Kazakh. SSR Ser. med. nauk no.2:54-57:63. (MIRA 16:10)
(THYROID GLAND) (LEAD POISONING)

ZEL'TSER, M.Ye.

Functional state of the pancreas in saturnism; preliminary report.
Trudy Inst.kraev.pat. AN Kazakh.SSR 10,116-120 '62.

(MIRA 16:5)

(LEAD POISONING) (PANCREAS—DISEASES)

MEL'NIK, N.A.; ZEL'TSER, N.M.

Determination of the consumption of electric power by belt conveyors. Nnuch.zap.Ukrniiproekta no.5:144-150 '61. (MIRA 15,7)
(Conveying machinery) (Electric power)

ZEL'TSER, N.M.

PRISEDSKIY, G.V., inzh.; ZEL'TSER, N.M., inzh.

Selecting an efficient shape of carrying rollers. Ugol' Ukr. 5 no.3:26-27
Mr '61.

(Conveying machinery)

(MIRA 14:3)

ZEL'TSER, N. M.

ALATORTSEV, S.A., prof., doktor tekhn.nauk; ANDREYEV, A.V., kand.tekhn.
nauk; ANCHAROV, I.L., inzh.; BALINSKIY, S.I., inzh.; BELOUSOV,
V.G., inzh.; VINITSKIY, K.Ye., kand.tekhn.nauk; VLASOV, V.M.,
inzh.; VORONTSOV, N.P., kand.tekhn.nauk; GIPSMAN, M.K., inzh.;
GLUZMAN, I.S., kand.tekhn.nauk; GUR'YEV, S.V., kand.tekhn.nauk
[deceased]; DEMIN, A.M., kand.tekhn.nauk; YEGURNOV, G.P., kand.
tekhn.nauk; YEFIMOV, I.P., inzh.; ZHUKOV, L.I., kand.tekhn.
nauk; ZEL'TSER, N.M., inzh.; KOSACHEV, M.N., kand.tekhn.nauk;
KOTOV, A.F., inzh.; KUDINOV, G.P., inzh.; LAPOVENKO, N.A., kand.
tekhn.nauk; MAZUROK, S.F., inzh.; MEL'NIKOV, N.V.; MUDRIK, N.G.,
inzh.; NIKONOV, G.P., kand.tekhn.nauk; ORLOV, Ye.I., inzh.;
POTAPOV, M.G., kand.tekhn.nauk; PRISEDSKIY, G.V., inzh.;
RZHEVSKIY, V.V., prof., doktor tekhn.nauk; RYAKHIN, V.A., kand.
tekhn.nauk; SIMKIN, B.A., kand.tekhn.nauk; SITNIKOV, I.Ye., inzh.;
SOROKIN, V.I., inzh.; STASTUK, V.N., kand.tekhn.nauk; STAKHEVICH,
Ye.B., inzh.; SUSHCHENKO, A.A., inzh.; TYUTIN, I.F., inzh.;
TYMOVSKIY, L.G., inzh.; FISENKO, G.L., kand.tekhn.nauk; FURMANOV,
B.M., inzh.; SHATAYEV, M.G., inzh.; SHESHKO, Ye.F., prof., doktor
tekhn.nauk; TERPIGOREV, A.M., glavnnyy red. [deceased];

(Continued on next card)

ALATORTSEV, S.A.---(continued) Card 2.

KIT, I.K., zamestitel' glavnogo red.; SHESHKO, Ye.P., zamestitel' otv.red.; BUGOSLAVSKIY, Yu.K., red.; BYKHOVSKAYA, S.N., red.; DIONIS'EV, A.I., kand.tekhn.nauk, red.; KOZIN, Yu.V., red.; SOKOLOVSKIY, M.M., red.; YASTREBOV, A.I., red.; DEMIDYUK, G.P., kand.tekhn.nauk, red.; KRIVSKIY, M.N., kand.tekhn.nauk, red.; LYUBIMOV, B.N., inzh., red.; MOLOKANOV, P.L., inzh., red.; REISH, A.K., inzh., red.; RODIONOV, L.Ye., kand.tekhn.nauk, red.; SLAVUTSKIY, S.O., inzh., red.; TRAKHMAN, A.I., inzh., red.; TRYMOVSKIY, L.G., inzh., red.; FIDELEV, A.S., doktor tekhn.nauk, red.; SHUKHOV, A.N., kand.tekhn.nauk, red.; TER-IZRAEL'YAN, T.G., red. izd-va; PROZOROVSKAYA, V.L., tekhn.red.; KONDRAT'YEVA, M.A., tekhn.red.

(Continued on next card)

ALATORTSEV, S.A.---(continued) Card 3.

[Mining; an encyclopedic dictionary] Gornoe delo; entsiklopedicheskii spravochnik. Glav.red.A.M.Terpigorev. Chleny glav. red.A.I.Baranov i dr. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu. Vol.10. [Mining coal deposits by the open-cut method] Razrabotka ugel'nykh mestorozhdenii otkrytym sposobom. Redkollegia toma; N.V.Mel'nikov i dr. 1960. 625 p.

(MIRA 13:2)

1. Chlen-korrespondent AN SSSR (for Mel'nikov).
(Coal mines and mining) (Strip mining)

KASYMOV, U.; VAYSELAT, A.S., vrach; ZEL'TSER, N.Ya., vrach

Control of trachoma in Kolkhozabad District. Zdrav. Tadzh. 7
no. 3:17-19 My-Je '60. (MIRA 14:4)

1. Predsedatel' Kolkhozabadskogo rayonnogo ispolnitel'nogo komiteta
(for Kasymov).

(KOLKHOZABAD DISTRICT—CONJUNCTIVITIS, GRANULAR)

ZEL'TSER, P.L., inzh.

Inventory of industrial equipment and machinery for 1962. Vest.-
mashinostro. 42 no.9:83-84 S '62. (MIRA 15:9)
(Industrial equipment--Accounting)

ZEL'TSER, P.N., inzh.

Conveyor for the assembly of the D-20B and D-24L hitched graders.
Stroi. i dor. mash. 7 no.4:39 Ap '62. (MIRA 16:7)

(Assembly-line methods)
(Graders (Earthmoving machinery))

ZEL'TSER, P.Ya.; YURCHAK, E.M.

Some possibilities for increasing the period between inspections of
the operation of electric drills. Burenis no.5:9-10 '64.

1. Shebelinskaya spetsializirovannaya kontora elektrobureniya. (MIRA 18:5)

ZEL'TSER, R.Ya., inzh.

Choosing cranes in relation to the parameters of the installations
under construction according to nomograms. Mekh.stroi. 20
no.57-10 My '63.

(MIRA 16:4)

(Cranes, derricks, etc.)

ZEL'TSER, R., inzh.

Improving the RN-1 mortar pump for feeding thick mastics to upper floors. Na stroi. Mosk. 2 no.12:16 D '59 (MIRA 13:3)
(Pumping machinery) (Mortar)

1. KRAPIVNER, Yu. A., ENG., ZEL'TSER, R. S., ENG.
2. USSR (600)
4. Efficiency, Industrial
7. Suggestions for rationalization in the field of special work. Biul. stroi. tekhn. 9, no. 22, 1952.
9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

1. ZEL'TSER, R. S., Eng.
2. USSR 600
4. Paint
7. Preparation of size paint by the I. I. Cherenkov, method, Biul. stroi, tekhn, 9, No. 23, 1952.
9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

ZEL'TSER, R. S.

House Painting

Fillerless coating. Sbor. mat. o nov. tekhn. v stroi. 15, No. 4, 1953.

Monthly List of Russian Accessions, Library of Congress, June 1953. Uncl.

ZEL'TSER, R.S.

Experience in covering walls and floors. Sbor.mat.o nov.tekh.v
stroj. 15 no.10:20-23 '53. (MLRA 6:12)
(Linocrusta--Walton) (Linoleum)

ZEL'TSER, R. S.

ZEL'TSER, R.S.; KOLODEY, A.P., redaktor; ERASIL'SHCHIK, S. ... redaktor;
TOIMI, A.M., tekhnicheskiy redaktor.

[Handbook on safety techniques for insulation workers] Pamiatka
po tekhnike bezopasnosti dlia izolirovshchikov. [Sostavil
R.S.Zel'tser. Redaktor A.P.Kolodej] 2. izd. Moskva, Gos. izd-vo
lit-ry po stroitel'stvu i arkhitekture, 1954. (MLRA 7:8)

1. Russia (1923- U.S.S.R.) Ministerstvo stroitel'stva.
Otdel tekhniki bezopasnosti i promyshlennoy sanitarii.
(Insulation(Heat)) (Safety engineering)

ZELUTSER, R.S.

[Progressive painting methods] Perekovyye metody proizvodstva
maliarnykh rabot. Moskva, Gos. izd. lit. po stroitel'stvu i
arkhitekture, 1954. 64 p.
(MIRA 8:1 D)

AID - P-9

Subject : USSR/Engineering
Card : 1/1
Author : Zel'tser, R. S.
Title : Execution of window-glazing jobs
Periodical : Sbor. mat. o nov. tekhn. v stroi., ¹⁶ 2, 22 - 28, 1954
Abstract : Various tools and equipment are described for efficiency in window glazing of a multi-story building with aluminum window sashes (on the Smolenskaya Ploshchad' in Moscow). 9 graphs.
Institution : All-Union Association of the Building Industry (Soyuzspetsstroy)
Submitted : No date

ZEL'TSER, R.S., inzhener.

Portable millstone paint grinder. Mekh.stroi. 11 no.8:23-24 '54.
(Paint) (Milling machinery) (MLRA 7:8)

ZEL'TSER, Rafail Simonovich; GOLOVINA, A.G., redaktor izdatel'stva; GUSEVA,
S.S., tekhnicheskiy redaktor

[Progressive glazing methods] Perekovye metody proizvodstva stekol'-
nykh rabot. Moskva, Gos. izd-vo lit-ry po stroit. i arkhitekture,
1956. 47 p.

(Glazing)

(MLRA 9:11)

ZEL'TSER, R.S., inzh.

Efficient mobile bitumen boiler with 1.8m³ holding capacity.
Mekh. stroi 15 no.9:19-20 S '58. (MIRA 11:10)
(Bitumen)

ZEL'TSER, R., inzh.

Efficient boiler for preparing bituminous materials. Ya stroi.
Mosk. 2 no.4:20 Ap '59. (MIRA 12:7)
(Bituminous materials) (Boilers)

ZEL'TSER, R.S., inzh.

Reusable portable container for ceramic tiles. Suggested by
R.S.Zel'tser. Rats.i izobr.prodl. v stroi. no.10:47-48
'59. (MIRA 12:11)

1. Po materialam tresta Mosotdelstroy No.3 Glavmosstroya.
(Tiles--Transportation)

KOZIN, I.G., inzh.; PEPEBOYM, G.I., inzh.; ZEL'TSER, R.S., inzh.

Efficient mobile bitumen boiler. Suggested by I.G.Kozin, G.I.
Peperboim, R.S.Zel'tser. Mats.i izobr.predl.v stroi, no.16:
73-75 '60. (MIRA 13:9)

1. Trest Mosotdelstroy No.3 Glavmosstroya, Moskva, proyezd Serova,
d.3.

(Bitumen)

"APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R001964410013-2

ZEL'TSER, R.S., inzh.

Mechanized puttying. Mekh. stroi. 17 no.12:21 D '60.

(Putty)

(MIRA 13:12)

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R001964410013-2"

KANTORER, S.Ye., prof., doktor ekonom. nauk; ZEL'TSER, R.Ya., inzh.

Reviews and bibliography. Mont. i. spets. rab. v stroi. 26 no.8:
32 Ag '64. (MIRA 17:11)

KANYUKA, N.S., kand. tekhn. nauk; KUCHER, M.G., inzh.; KRYUKOV, I.M.; ZEL'TSER, E.Ya.; RODICHKINA, M.P.; MIKHAYLOV, I.K.; GAYDAY, V.K., red.

[Overall mechanization of the assembly of industrial structures; methodological manual on the selection of efficient sets of assembling machinery] Kompleksnaia mekhanizatsiia montazha promyshlennykh sooruzhenii; metodicheskoe posobie po výboru ratsional'nykh komplektov montazhnykh mashin. Kiev, Budivel'nyk, 1965. 192 p. (MIRA 19:1)

1. Nauchno-issledovatel'skiy institut stroitel'nogo proizvodstva.

VAYNSHTEYN, B.S., kand. ekon. nauk; LEYKINA, K.B.; MINTS, M.G.;
LUCHINSKIY, S.M.; KIYEVSKIY, V.G., kand. ekon. nauk;
VINEY, [REDACTED]; GUREVICH, M.S.;
ZIKEYEV, B.V., kand. tekhn. nauk; RUBINOV, [REDACTED];
SARYCHEV, V.S., kand. tekhn. nauk; APARIN, I.L.;
KRINITSKAYA, M.Ye.; DZIKOVSKIY, G.I.; ZEL'TSER, R.Ya.;
GOL'DENBERG, I.L.; ISAKOVSKIY, I.G.; DEMIDOVA, S.N.,
[REDACTED], red.

[Economic efficiency of capital investments and the introduction of new equipment in construction] Ekonomicheskaya effektivnost' kapital'nykh vlozhenii i vnedreniya novoi tekhniki v stroitel'stve. Moskva, Stroizdat, 1965.
(MIRA 18:8)

1. Moscow. Nauchno-issledovatel'skiy institut ekonomiki stroitel'stva. 2. Rukovoditel' sektora ekonomiceskoy effektivnosti novoy tekhniki Nauchno-issledovatel'skogo instituta ekonomiki stroitel'stva, Moskva (for Kiyevskiy).
3. Sektor ekonomiceskoy effektivnosti novoy tekhniki Nauchno-issledovatel'skogo instituta ekonomiki stroitel'stva, Moskva (for all except Demidova). 4. Nauchno-issledovatel'skiy institut ekonomiki stroitel'stva, Moskva (for Demidova).

ZLATKOVSKAYA, N.M.; ZAKSTEL'SKAYA, L.Ya.; ZEL'TSER, S.F.

Some characteristics of the clinical manifestations in diseases caused by hemadsorbing viruses. Vop. okh. mat. i det. 6 no.11: 14-19 N '61. (MIRA 14:12)

1. Iz infektsionnogo otdela (zav. prof. M.Ye. Sukhareva) kafedry pediatrii (zav. - deyativitol'nyy chlen AMN SSSR prof. G.N.Speranskiy) Tsentral'nogo instituta usovershenstvovaniya vrachey i Instituta virusologii imeni D.I.Ivanovskogo AMN SSSR.
(RESPIRATORY ORGANS DISEASES) (VIRUS DISEASES)

TITLE: Heat of reaction in catalytic reforming of gasoline fractions B

SOURCE: Khimiya i tekhnologiya topliv i masel, no. 1, 1965, 12-16

TOPIC TAGS: heat of reaction, heptane, aromatic hydrocarbon, napthalene, crude petroleum

ABSTRACT: In previous studies an empirical equation has been suggested for the determination of the heat of reaction of hydroforming:

$$q_{298} = (4.5 a_1 + 5.36 a_2 + 5.45 b) - \gamma c$$

where q_{298} = heat of reaction at 298°C , kcal/kg, a_1 , a_2 , c , b = yields of aromatic hydrocarbons from naphthenes and paraffins, gas and coke respectively (in per cent weight of crude material); γ = coefficient, depending on gas composition and varying from 2.5 to 3.2. The heat of reaction of hydrocracking of heptane calculated from this equation and the actual value are 32 and 97 kcal/kg, respectively. Thus calculation by this equation is substantially in error. In addition, this equation cannot be used in determin-

UOC: 66.092 : 665.521.2

ACC NR: AP6012991

0

ing the heat of reaction of the process under industrial conditions, that is, in 500°C. The empirical derivation of this equation casts doubt on its possible use in qualitative description of the piat-forming process. Accordingly, the authors developed an analytical method of determining heat of the reaction in catalytic reforming based on a kinetic scheme of the process, affording determination of heat of reaction with considerably greater accuracy than other methods. The crude material usually contains a slight amount of olefins, which upon further analysis is united with the paraffins. The possibility of calculating the heat of reaction of the complex technical mixture of hydrocarbons with different molecular weights

SUB CODE: 11, 07 / SUBM DATE: none / ORIG REF: 010 / OTH REF: 001

Card 2/2 BIG

ZHOROV, Yu.M.; PANCHENKOV, G.M.; ZEL'TSER, S.P.; TIRAK'YAN, Yu.A.

"Development of the mathematical description of plating for optimization of a process. Part 1. Kin. i kat. 6 no. 61092-1097 N-D '65
(MTRA 19e1)

1. Moskovskiy institut neftakhimicheskoy i gazovoy promyshlennosti imeni Gubkina. Submitted June 23, 1964.

ZEL'TSMR, V. I.

International direct freight lines of the USSR; a study of their development and practical organization. Izd. 3., perer. Moskva, Transzhelizdat, 1935. 182 p. (50-42839)

HE2457.24 1935

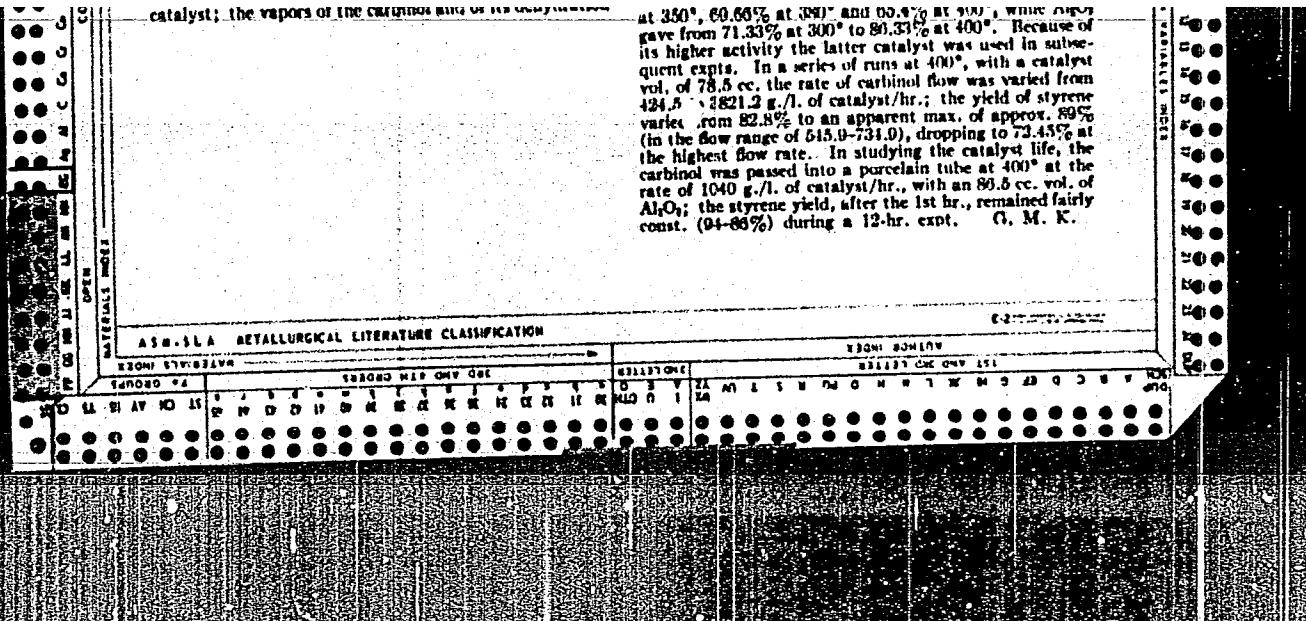
ZEL'TSER, V.; BATMANOV, A.

Mechanization and automation of industrial processes. Metallurg
9 no.6:38 Je '64. (MIR) 17:9

1ST AND 2ND QUARTER		3RD AND 4TH QUARTER																	
PROCESSES AND PROPERTIES INDEX		INDEX																	
ZEL'TSER, V.M.		/ 3																	
Ca																			
<p>Synthesis of oil-soluble artificial phenol resins of the type of albertol. II. S. N. Ushakov and V. M. Zel'tser. <i>Narodnyi Komissariat Tyschel' Prom. S. S. R., Nauk.-Issledovatel. Inst. Plasticheskikh Mass., Plasticheskie Massy, Sbornik 2, 160-8(1937); cf. C. A. 30, 1863^a.</i> Resol, as well as novolac, forms an oil-sol. resin with abietic acid. PhOH from peat or brown coal pyrolysis can be used in the synthesis. Glycerol diacetate, from Na abietate and glycerol dichlorophhydrin, reacts with novolac to give an albertol-like resin. H. M. L.</p>																			
<p style="text-align: center;">ASME SLA METALLURGICAL LITERATURE CLASSIFICATION</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">FROM STERILE COPY</td> <td style="width: 40%;">SERIALS MAY ONLY ONE</td> <td style="width: 10%;">ILLUSTRATION</td> <td style="width: 40%;">FROM BORROW</td> </tr> <tr> <td>SANDBO 74</td> <td></td> <td></td> <td>REPLACED ONE ONLY LST</td> </tr> <tr> <td>W H A V NO 25</td> <td>W H D F W K M A M M M M M K M D O I</td> <td>K A M L S B D M O R V T W H D G 3 9 V</td> <td></td> </tr> <tr> <td>W H A V NO 25</td> <td>W H D F W K M A M M M M K M D O I</td> <td>K A M L S B D M O R V T W H D G 3 9 V</td> <td></td> </tr> </table>				FROM STERILE COPY	SERIALS MAY ONLY ONE	ILLUSTRATION	FROM BORROW	SANDBO 74			REPLACED ONE ONLY LST	W H A V NO 25	W H D F W K M A M M M M M K M D O I	K A M L S B D M O R V T W H D G 3 9 V		W H A V NO 25	W H D F W K M A M M M M K M D O I	K A M L S B D M O R V T W H D G 3 9 V	
FROM STERILE COPY	SERIALS MAY ONLY ONE	ILLUSTRATION	FROM BORROW																
SANDBO 74			REPLACED ONE ONLY LST																
W H A V NO 25	W H D F W K M A M M M M M K M D O I	K A M L S B D M O R V T W H D G 3 9 V																	
W H A V NO 25	W H D F W K M A M M M M K M D O I	K A M L S B D M O R V T W H D G 3 9 V																	

catalyst; the vapors of the carbonyl ring of the styrene

at 350°, 60.66% at 380° and 80.4% at 400°; while α_{D}^{20} gave from 71.33% at 300° to 80.31% at 400°. Because of its higher activity the latter catalyst was used in subsequent expts. In a series of runs at 400°, with a catalyst vol. of 78.5 cc., the rate of carbonyl flow was varied from 424.5 to 2821.2 g./l. of catalyst/hr.; the yield of styrene varied from 82.8% to an apparent max. of approx. 89% (in the flow range of 615.0-731.0), dropping to 73.45% at the highest flow rate. In studying the catalyst life, the carbonyl was passed into a porcelain tube at 400° at the rate of 1040 g./l. of catalyst/hr., with an 80.8 cc. vol. of Al_2O_3 ; the styrene yield, after the 1st hr., remained fairly const. (94-96%) during a 12-hr. expt. G. M. K.



ZEL'TSER, V.M.

CA

PROCESSES AND PROPERTIES INDEX

10

Prediction of styrene by vapor-phase dehydration of methylenephenylcarbinol. A. A. Vansheidt and V. M. Zel'tser, *Zhur. Priklad. Khim.* (J. Applied Chem.), 21, 613-14 (1948).—On an Al_2O_3 catalyst, MePhCH=CH₂ (90% pure) passed at a rate of 0.37 g./l. catalyst/hr. gave, at 382, 320, 350, and 380, and 400°, products contg. 61.31, 67.91, 76.11, 78.01, and 78.39% PhCH₂CH₃, corresponding to yields of 71.33, 70.00, 85.31, 86.44, and 80.33%. A Glukhov clay had a substantially lower catalytic activity, giving only a 65-70% yield at 380-400°. At 400°, with 78.6 ml. Al₂O₃ catalyst, at the feed rates of 424.5, 477.7, 545.9, 636.0, 682.4, 707.7, 734.9, 764.3, 1273.9, 2123.1, and 3821.3 g./l. catalyst/hr., the contents of PhCH₂CH₃ in the product were 78.97, 78.6, 83.07, 80.12, 70.94, 80.38, 80.93, 70.43, 72.03, 67.51, and 42.00%; the yields 82.8, 84.16, 89.30, 89.44, 88.95, 87.89, 80.21, 84.22, 82.24, 78.65, and 72.45%; the amts. produced per 1 l. catalyst/1 hr., 273.0, 312.8, 379.7, 115.5, 47.1, 484.6, 610.2, 520.0, 815.3, 1298.0, and 2155.0 g. The near-constancy of the activity of the Al₂O₃ catalyst is illustrated by the results at 400°, 1010 g./l. catalyst/hr., 1, 3, 6, 9, and 12 hrs., content of PhCH₂CH₃ 60.73, 85.20, 80.83, 77.3, and 74.35%, yield 61.4, 93.5, 80.0, 89.19, and 88.25%. N. Thom

ASM-SEA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R001964410013-2"

ZEL'TSER, V.M.; KULAGIN, V.D.; MOROZOV, V.D.

Mechanization of auxiliary operations on the 280 mill at the
Kirov Plant in Makayevka. Met. i gornorud. prom. no.6:71-72
N-D '65.
(MIRA 18:12)

ZEL'TSER, V.Ya.

Efficient hauling of fruit from orchards. Kons. i ov. prom. 13
no. 9:27-28 S '58. (MIRA 11:10)

1. Sovkhoz imeni Frunze Moldavskoy SSR.
(Fruit--Transportation)

ZEL'TSER, V.Ya.

Operating an orchard fan sprayer. Kons. 1 ov. prom. 14 no.42
34-35 Ap '59.
(MIRA 12:5)

1. Sovkhoz imeni Frunze Moldavskoy SSR.
(Spraying and dusting)

GONTARENKO, M.A., starshiy nauchnyy sotrudnik; ZEL'TSER, V.Ya., inzh.-mekhanik; TOPOR, I.A., agronom-plodovod

Filling station for sprayers. Zashch.rast.ot vred.i bol. 5
no.7:18-19 J1 '60. (MIRA 16:1)

1. Moldavskaya stantsiya Vsesoyuznogo instituta zashchity
rasteniy (for Gontarenko). 2. Sovkhoz imeni Frunze (for
Zel'tser, Topor).

(Spraying and dusting equipment)

IVANOV, P.V., prof.; ZEL'TSER, V.Ya., inzh.; FITOVA, L., red.

[Bases for the mechanized establishment of vineyards on
slopes] Osnovy mekhanizirovannogo osvoenija sklonov pod
vinogradniki. Kishinev, Kartia moldoveniaske, 1965. 127 p.
(MIRA 18:9)

IVANOV, V.; ZEL'TSER, Ya.

As suggested by the district finance department. Fin.SSSR 21
no.5:55-56 My '60. (MIRA 13:7)

1. Zaveduyushchiy TSentral'nym rayfinotdelom Odessy (for Ivanov).
2. Starshiy inspektor byudzheta TSentral'nogo rayfinotdela Odessy
(for Zel'tser).

(Odessa--Industrial management)
(Finance)

5(3)

SOV/71-59-3-12/23

AUTHOR: Zel'tser, Ya.V.TITLE: Solubility of Hardness Salts in Vodka (Rastvorimost' v vodke
soley zhestkosti)

PERIODICAL: Spirtovaya promyshlennost', 1959, Nr 3, pp 28-32 (USSR)

ABSTRACT: The settling of a precipitate from vodka during its storage depends upon the solubility of various salts of hardness in it. The salt composition of a softened water causes the settling of a precipitate of the following chemical composition: CaCO_3 ; MgCO_3 ; CaSO_4 ; MgSO_4 . Starting from the law of interacting masses the author shows that these salts can settle in precipitate from vodka in cases when the product of concentrations of the present ions exceeds a certain constant value, which is different for different salts. The author then cites the results of studies which made it possible to find out experimentally the values of these constants for the vodkas of various degrees of strength: 40, 50 and 56%, and for the softened water. Thereby the limiting values of concentrations of various salts have

Card 1/2

Solubility of Hardness Salts in Vodka

SOV/71-59-3-12/23

been established, which guarantee the non-occurrence of settling precipitates from vodkas in the process of their storage. There are: 6 tables and 2 graphs.

Card 2/2

ZEL'TSER, Ya. V.

Softening of water of higher alkalinity. Spirt. prom. 25 no. 7:14-15
'59.

(Water--Softening)

(MIRA 13:2)

ZEL'TSER, Ya. V.

Cand Tech Sci - (diss) "Study of water softening process in the liquor-water production." [Kiev, 1960?]. 21 pp with diagrams; (Ministry of Higher and Secondary Specialist Education Ukrainian SSR, Chernigovskaya Oblast Board of the Scientific-Technical Society of the Food Industry, Kiev Technology Inst of the Food Industry); 200 copies; price not given; (KL, 6-61 sup, 217)

СССР, Я. В.

USSR/Chemical Technology. Chemical Products and
Their Application--Water treatment. I-12
water Sewage.

Abs Jour: Ref Zhur-Khimika, No 3, 1957, 9143

Author : Zel'tser, Ya. V.

Inst : Not given

Title : The Hardness of Cation-Exchange Softened Water
Used in the Production of Vodka

Orig Pub: Spirt. prom-st, 1955, No 4, 16

Abstract: It is proposed to establish the maximum permissible
hardness of the water used in the production of
vodka by experimental means, taking into account
the quality of the applied water and the softening
process used.

Card 1/1

5(2)

AUTHOR:

Zel'tser, Ye. Yu.

SOV/32-25-7-9/50

TITLE:

Complexometric Determination of Zinc and Cadmium in Soldering Materials (Kompleksometricheskoye opredeleniye tsinka i kadmiya v pripoyakh)

PERIODICAL:

Zavodskaya laboratoriya, 1959, Vol 25, Nr 7, pp 798-799 (USSR)

ABSTRACT:

A volumetric and complexometric method was developed which is based upon a different resistivity of trilonate complexes of zinc and cadmium with regard to sodium diethyldithiocarbamate (Ref 1). After a separation of antimony and silver in a weakly ammoniacal medium, the sum of zinc + cadmium is titrated with a 0.1 m solution of trilon B in the presence of Chromogene black ET-OO. The zinc content is calculated from the difference. In order to determine the completeness of the cadmium precipitation, experiments were carried out with artificial mixtures (Table 1) and with mixtures of different zinc or cadmium content (Table 2), and it was found that zinc can also be titrated with trilon B in the presence of larger amounts of

Card 1/2

Complexometric Determination of Zinc and Cadmium
in Soldering Materials

SOV/32-25-7-9/50

cadmium. The method described was also tested with electro-
technical soldering materials and the results were compared
with those achieved according to the gravimetric method
(Table 3). The course of the analysis is given. There are
3 tables and 1 Soviet reference.

Card 2/2

Z E L I S E R , Y e X u

SOV/32-23-9-13/2
 Bui'yanov, N. D., Kruglov, P. I., Serebryakov, V. P.,
 Oratova, V. A., Mihalevsky, V. F., Savchenko, Ye. Yu.,
 G. J., Nukoravsky, D. V., Solntseva, Ye. Yu.,
 News in Brief

5(2)

PERIODICAL: Zavodskaya laboratoriya, 1959, Vol. 25, Nr. 9, p 1069 (USSR)

ASSOCIATION:
 N. D. Bui'yanov, V. A. Mihalevsky, V. F. Savchenko, Ye. Yu.,
 News in Brief

Card 1/3

Card 2/3

T. A. Krutov, I. A. Mihalevsky, Institute of Technical Chemistry
 Correspondingly Headed much USSR (Institute of High-molecular
 Compounds of the Academy of Sciences, USSR) suggest a rapid
 method for the determination of sulphur in the matrix of
 asphaltic resins. The method is based upon a relationship
 between the concentration of sulphur and the height of the
 polarographic-wave, the half-wave potential of which lies at 0.79 v.
 The analysis was carried out on a polarograph of the construction
 of the Institute of Technical Chemistry. The relative maximum error
 is given with 5.5% and an analysis time of 10-15 minutes.

A. V. Kruglov, Ye. Yu. Savchenko, and V. F. Ivanov, Tsel' Lichanskiy
 Research Institute (Central Works Laboratory of the Likhachauk
 Metallurgical Plant) describe a method for the radiometric determination
 of Potassium (Kef-1) in a catalyst for the isobutanol synthesis.
 The investigations were carried out in a K-2 apparatus with a
 counter tube Al-2.

T. A. Krutov, I. A. Mihalevsky, Institute of Technical Chemistry
 Correspondingly Headed much USSR (Institute of High-molecular
 Compounds of the Academy of Sciences, USSR) suggest a rapid
 method for the determination of sulphur in the matrix of
 asphaltic resins. It consists, in principle, in that the zinc pulverized
 sample is burned in oxygen behind a platinum catalyst, and that
 combustion products are captured in a natural hydrogen peroxide
 solution. Zinc remaining sulphuric acid is titrated in the letter
 with a 0.01N Ba(OH)₂ solution.

Ye. Yu. Savchenko, I. A. Mihalevsky, Institute of the Electrical
 Power Industry (Scientific Research Institute of the Electrical
 Power Industry) describes a volumetric-complexometric method for the
 determination of nickel in alloys which are used for the
 production of permanent magnets on the basis of Fe-Ni-Al-Co-Cu.
 Ni is separated from the accompanying elements by a 1% ammonium
 diethanol ethyleneglycol solution. Co being first transferred into the
 trivalent form and then titrated with titriles II.

Card 2/3

G. D. Matsevov, D. V. Nukoravsky, M. V. Solntseva, Moscow
 Textile Party Institute (Moscow Textile Institute) developed four
 gravimetric methods for the determination of silicon in organic
 alkaline and silicon-organic alkalines and found that the most
 exact results are obtained with the sulphuric acid method.
 There is 1 Soviet reference.

ASSOCIATION: University polytechnic Institute (Central Works Laboratory of the
 Tsel' Lichanskiy Khimicheskii (Central Works Laboratory of the
 Lichachauk Khimicheskii) Institute of Technical Chemistry
 Correspondingly Headed Al-2 (Institute of High-molecular
 Compounds of the Academy of Sciences, USSR) Tsel' Lichanskiy
 Research Institute (Scientific Research Institute of the Electrical
 Power Industry) Matematicheskii (Scientific Research
 Institute of the Electrical Power Industry) Matematicheskii
 Institute (Moscow Particle Institute).

Card 3/3

ZEL'TSER, YE. I.

The Committee on Stalin Prizes (of the Council of Ministers USSR) in the fields of science and inventions announces that the following scientific works, popular scientific books, and textbooks have been submitted for competition for Stalin Prizes for the years 1952 and 1953. (Sovetskaya Kultura, Moscow, No. 22-40, 20 Feb - 3 Apr 1954)

Name	Title of Work	Nominated by
Baranov, A. N.	"Geodesy in Tunnel Construction"	Ministry of Railways
Yegunov, K. I.		
Zel'tser, Ye. I.		
Lebedev, N. N.		
Slovodchikov, D. A.		
Cheremisin, M. S.		

SO: W-30604, 7 July 1954

"APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R001964410013-2

MALYKH, L., kand.tekhn.nauk; ZEL'TSER, Yu., inzh.

Seals made of polymers. Izobr.i rats. no.2:19-20 F '60.

(Sealing (Technology))
(Polymers)

(MIRA 13:8)

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R001964410013-2"

SUZDAL'SKIY, V., inzh.; ZEL'TSER, Yu., inzh.; PERTSOV, V., starshiy
inzhener; KARBAKOV, G.

Capron is used in the manufacture of machinery. Izobr. i rats.
no.1:4-5 Ja '62. (MIRA 14:12)

1. Irkutskiy zavod tyazhelogo mashinostroyeniya (for Suzdal'skiy).
2. Vsesoyuznyy nauchno-issledovatel'skiy institut metallurgicheskogo
mashinoatroyeniya (for Zel'tser). 3. Azerbaydzhanskiy nauchno-
issledovatel'skiy institut elektrotekhnicheskoy promyshlennosti
(for Pertsov). 4. Predsedatel' Novgorodskogo oblastnogo soveta
Vsesoyuznogo obshchestva izobretateley i ratsionalizatorov (for
Karbanov).

(Machinery industry)
(Nylon)

TITLE: Cladding a continuously moving metallic strip with plastics

SOURCE: Ref. zh. Metallurgiya, Abs. 10D151

REF SOURCE: Tr. Vses. n.-i. i proyektno-konstrukt. in-ta metallurg. mashinostr.,
sb. 14, 1964, 131-144

TOPIC TAGS: polyvinyl chloride, vinyl plastic, metal cladding,
plastic coating

ABSTRACT: An experimental cladding line has been set up at the All-Union Scientific Research Institute for Planning and Design of Metallurgical Machinery in conjunction with the Avtomatprom Institute in Rustavi. Its length is 25 m, width - 4m, and height - 3m. The experimental cladding line is capable of cladding a continuous metal strip, 300 mm wide and 0.5 mm thick, with polyvinyl chloride up to 0.3 mm thick at the rate of 60 m/min. The technology and equipment are described in detail. The merits of the given method are analyzed. Orig. art. has: 6 figures. Bibliography of 8 titles. L. Kochenova. [Translation of abstract] [NT]

SUB CODE: 11/ SUBM DATE: none/

Card 1/1 CC

UDC: 621.771.8.005

L 29599-66 EWP(;) / EWT(m) / T / EWP(v) / EWP(t) / ETI IJP(c) RM / WW / JD / WB
ACC NR: AP6014087 SOURCE CODE: UR/0025/66/000/004/0028/0032

47
46
B

AUTHOR: Zel'tser, Yu. (Engineer); Pavlov, V.

ORG: [Zel'tser] All-Union Scientific Research Institute for the Planning and Design
of Metallurgical Machinery (Vsesoyuznyy nauchno-Issledovatel'skiy i proyektno-konstruk-
torskiy institut metallurgicheskogo mashinostroyeniya)

TITLE: Plastic reinforced metal

SOURCE: Nauka i zhizn', no. 4, 1966, 28-32 and appropriate inserts following p. 32

TOPIC TAGS: bonding property, plastic coating, polyvinyl chloride, corrosion pro-
tection

ABSTRACT: The authors discuss the method used for binding polyvinyl chloride ~~corro-~~
~~sion-resistant film~~ to a low carbon steel band. An adhesive based on ~~PED-B~~ epoxy and
perchlorovinyl was used for bonding ~~the PVC~~ film to the band. A schematic is given
for this process. The bonding operation was made a part of the band manufacturing pro-
cess. One important disadvantage was the time required for drying the bonding agent
in relation to the rate of band feed. This problem was solved by using rf-current
ovens. Tests conducted to determine the properties and characteristics of the new
material showed that the PVC protective coating withstood both ~~corrosion~~, temperature
and such operations as stamping. Among its highly desirable properties is the fact

Card 1/2

L 29599-66

ACC NR: AP6014087

that the PVC coating also acts as an insulator which is not true of other corrosion resisting coatings such as nickel plating etc. Orig. art. has: 1 figure.

SUB CODE: 11/ SUBM DATE: none/

Card 2/2 CC

KUSHNAREV, D.M., kand.tekhn.nauk; PAVLOV, V.P., inzh.; ZEL'TSER, Yu.I.; CHEREPANOV, G.S.

Industrial testing of a machine for charging a hole with "igdanit."
Gor. zhur. no.9:46-47 S '62. (MIRA 15'9)

1. Gosudarstvennyy institut gornokhimicheskogo syr'ya (for Kuzhnarev, Pavlov). 2. Gosudarstvennyy proyektno-konstruktorskiy institut avtomatizatsii rabot v ugol'noy promyshlennosti (for Zel'tser). 3. Institut gornogo dela im. Skochinskogo (for Cherepanov).

(Explosives) (Blasting--Equipment and supplies)

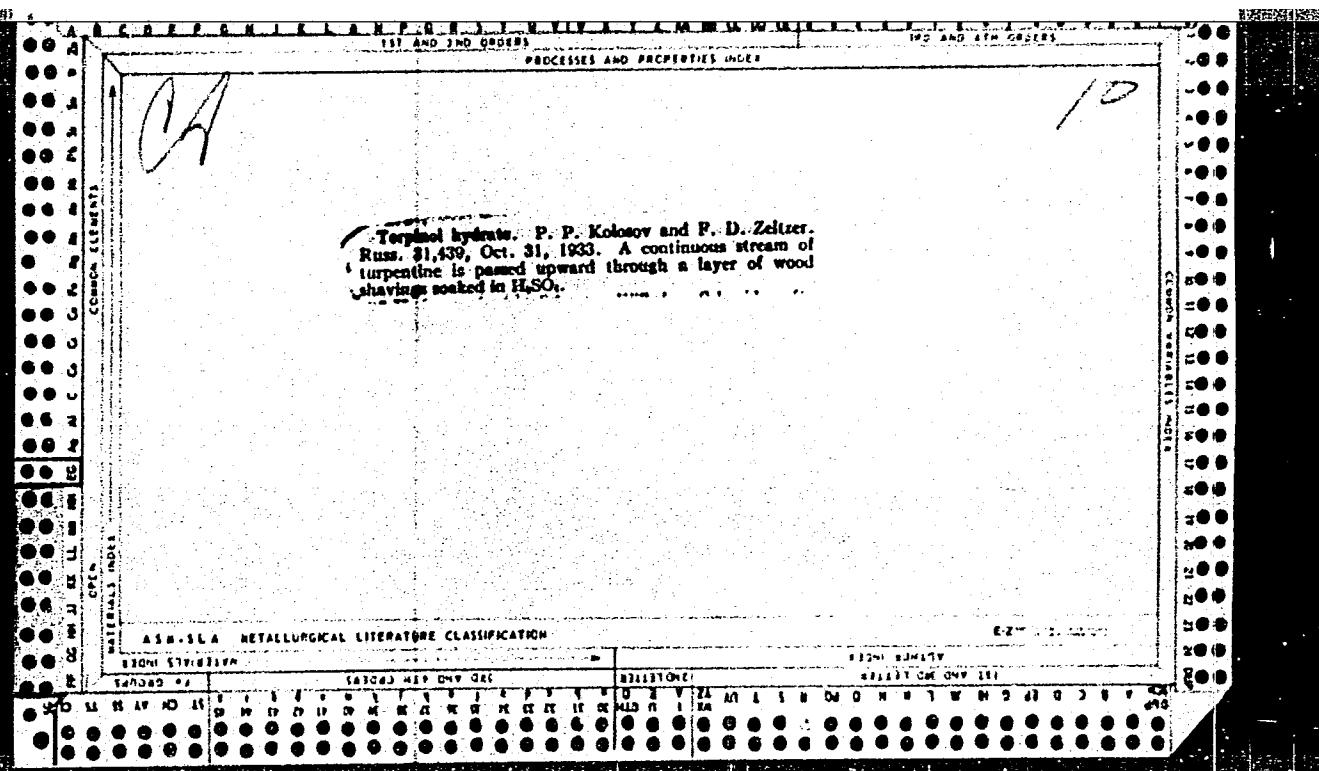
ZEL'TSERMAN, I.M.

Problems pertaining to the durability of the KNU-6 mowing machine.
Trakt. i sel'khozmash. 30 no.9:26-29 S '60. (MIRA 13:9)
(Mowing machines)

ZEL'TSMAN, L.

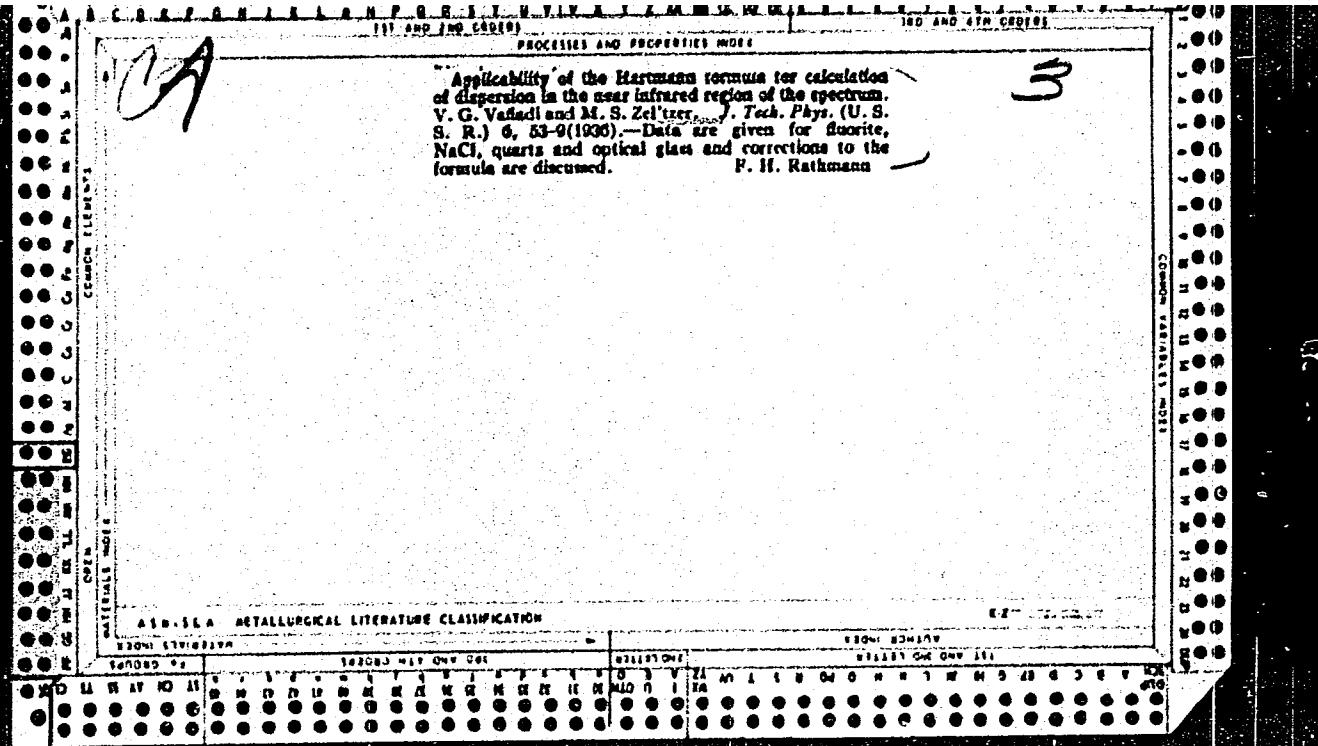
Zel'tsman, L. - "Pages from life", (On the hero of Socialist Labor of the "Primorskugol" Combine, A. S. Alliluyev, outline), Sov. Primor'ye, No. 6, 1948, p. 58-73.

SO: U-3042, 11 March 53, (Letopis 'Zhurnal 'nykh Statey, No. 8, 1949).



APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R001964410013-2"

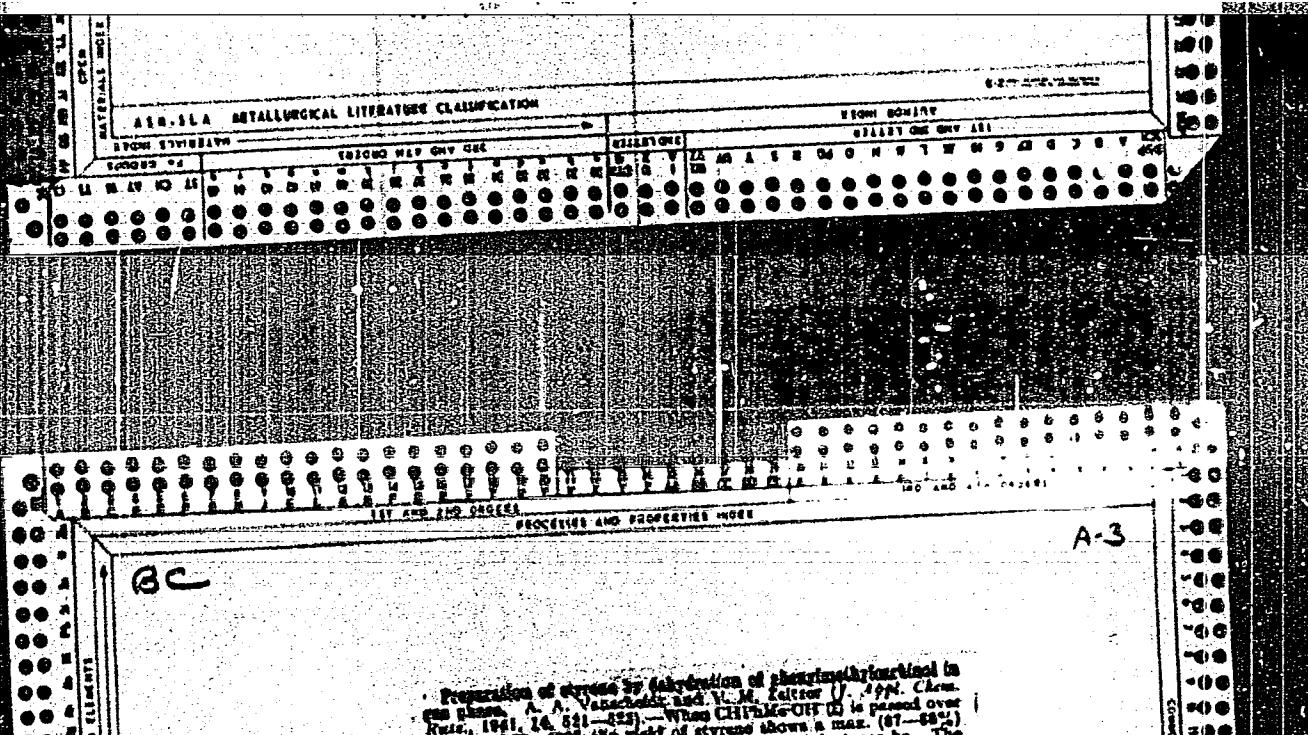


ZEL'TSER, R. S.

Tiles

Facing surfaces with ceramic and mosaic tiles. Stroi. prom. 30, no. 8, 1952.

Monthly List of Russian Accessions, Library of Congress
November 1952. UNCLASSIFIED.

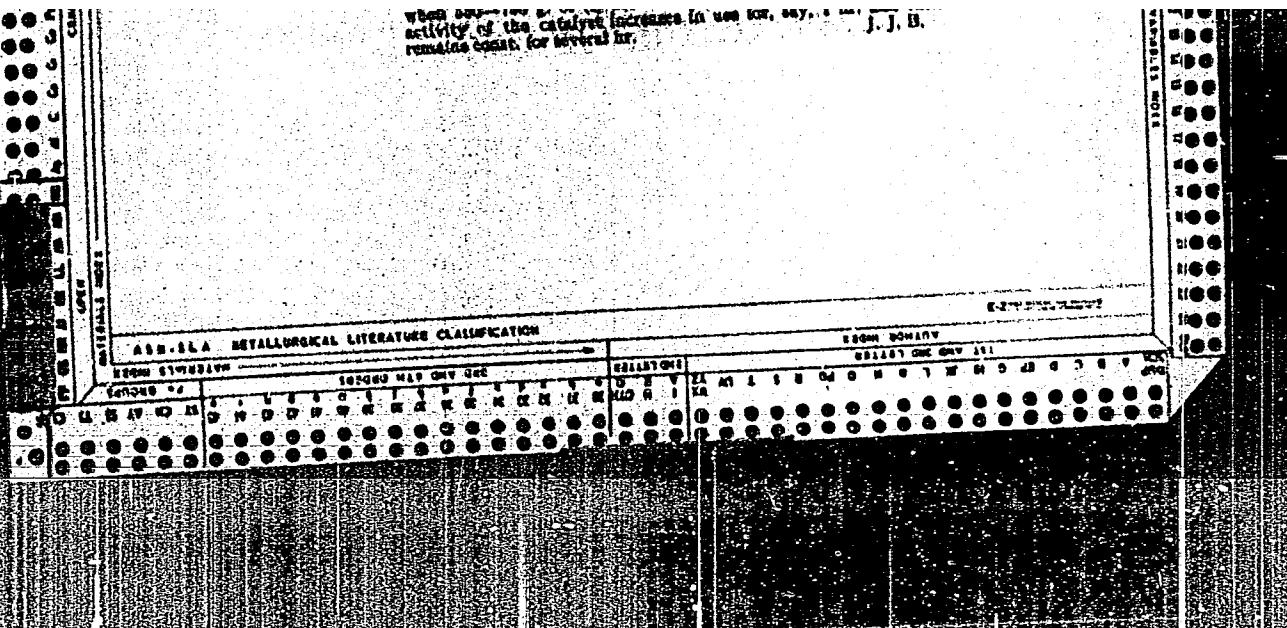


APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R001964410013-2"

"APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001964410013-2

When pressure is increased [in atm] the activity of the catalyst increases [in mole/liter]. J. J. B.
remains constant for different pressures.



APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001964410013-2"

